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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

ART UNIT	PAPER NUMBER
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DATE MAILED:

11/27/90 3

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/131,522

Applicant(s)

Knueven et al.

Examiner

N. Bhat

Group Art Unit

1761



☒ Responsive to communication(s) filed on Nov 4, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-18 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-18 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

1. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 10, applicant is requested to draft the claim without using "but excluding sulfuric acid and hydrochloric acid. Applicant should draft the claims positively and recite "excluding sulfuric acid and hydrochloric acid" and avoid using "but" language. In claims 5 and 9 applicant's should recited " The method defined in claim 1 wherein the food is a leavened backed good including baking carbonate wherein said sodium bisulfate is in an amount effective to react with the backing carbonate to release carbon dioxide to the leaven the baked good. Similarly, applicant in Claim 9 should recite "The method defined in claim 1 wherein the food is a beverage wherein said sodium bisulfate is added in an effective amount to enhance the flavor of the beverage. Applicant is reminded that process involves preparing food wherein sodium bisulfate is used as an acidulant, not to a method of preparing food. Correction such as set forth above is required.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Knueven in combination with Bull.

Knueven discloses the invention substantially as claimed.

Knueven teach a method of preserving animal feed by treating the feed with an inorganic acid such as sodium bisulfate. The acid is substantially dissolved and distributed uniformly through the animal feed. The acid is added to feed grain in an amount to reduce the pH of the feed to less than 4. 5. Knueven specifically teach that sodium bisulfate is effective in prevent the growth of mold and fungus in animal feed and that the acid can be handles without harm to the skin and also safe for ingestion by animals and further the FDA has approved the use of sodium bisulfate as an additive in animal feed. The sodium bisulfate is manufactured by Jones-Hamilton and is certified under ISO 9002 and meets Food Chemicals Codex specifications.[Note Column 3, lines 17-41]

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However, Knueven does not specifically recite that sodium bisulfate is used as an acidulant for use in food products such as leavened bread and beverages.

Knueven does teach using sodium bisulfate as a safe acid for lowering the pH in animal feed and further is safe for consumption for animals and suggests that the sodium bisulfate can be used in animal food products. The specific sodium bisulfate produces contains 93% sodium bisulfate and 7% sodium sulfate by weight, is dry crystalline solid having a spherical shape approximately 0.74 mm in diameter the product is hygroscopic and readily soluble in water.

Bull teaches making a germicidal iodine composition which can be used in institutional health care settings, restaurant and food preparation facilities and food manufacturing and processing. Bull teaches that included in the iodine composition is an acidulant. Specific examples of an acidulant is sodium bisulfate.[Note Column 5, lines 25-45] Admittedly, Bull does not teach using the iodine composition which is to be consumed, the iodine composition is used to disinfecting in food preparation and used for sanitizing hands, equipment etc. in the food industry.

It would have been obvious from the combined teachings of Knueven and Bull that sodium bisulfate can be used as an acidulant in preparing food. The prior art specifically suggests that sodium bisulfate is a recognized acidulant as described in Bull, and to use sodium bisulfate as an acidulant in food products where sodium bisulfate is used for controlling the pH taught by Knueven thus rendering the invention as a whole obvious absent criticality in showing.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nisperos-Carriedo et al. teach a method of coating fruits or vegetables with a

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composition comprising a polysaccharide polymer, a preservative, and acidulant and lecithin and a second emulsifier. The sodium bisulfate is used as a preservative in Nisperos-Carriedo et al. Reddy et al. teach sodium bisulfate can be used as a pH controller in the cheese manufacturing. Pearline et al. teach a process of producing cottage cheese curd produced by using an aqueous mixture of sodium bisulfate and sulfuric acid.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nina Bhat whose telephone number is (703) 308-3879. The examiner can normally be reached on Mondays-Fridays from 9:20 AM to 6:00 PM.

The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3602.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.


NINA BHAT
PRIMARY EXAMINER
GROUP 1300 1700